

INFORMATION REPORT INFORMATION REPORT

CENTRAL INTELLIGENCE AGENCY

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C-O-N-F-I-D-E-N-T-I-A-L

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REPORT

SUBJECT Machine Tools
Manufactured in Communist China

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INFORMATION REPORT INFORMATION REPORT

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STANDARD EQUIPMENT

- ① Complete electric equipment including motor and control
- ② Coolant pump
- ③ Square tool post
- ④ 4-jaw independent chuck
- ⑤ Steady rest
- ⑥ Follow rest
- ⑦ Driver plate
- ⑧ Set of change wheels
- ⑨ Set of wrenches

CHINA NATIONAL MACHINERY IMPORT CORP. (IMPORT—EXPORT)

Er-I-Kou, Hsi-Chiao, Peking, China · Cable Address: "MACHIMPORT" Peking

BRANCHES

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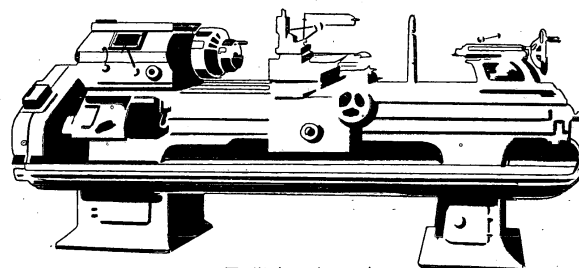
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53-183-20

MING CHING

Lathes

6' — 8' — 10'



明精車床

EXPORTERS

CHINA NATIONAL MACHINERY IMPORT CORPORATION

MING CHING LATHES MODEL L AND F

Designed for accurate, high class general service, these powerful and efficient lathes follow approved modern practice in construction.

THE BED is heavily ribbed to resist torsional strains. It is provided with a wide, deep gap for accommodating works of large diameter. Vee ways on the bed take up cutting stresses and accurately locate the saddle. The cast iron used has a steel content and this reduces wear.

THE GEARS IN THE HEADSTOCK are made of steel and tempered, ensuring a very powerful spindle drive. The gears for changing spindle speeds are mounted on spline shafts. On stopping, a brake quickly comes into action to bring the spindle quickly to rest. The headstock cover is hinged and oil tight when closed and the gears run in oil bath.

THE MAIN SPINDLE is hollow and amply proportioned. It is carried in long adjustable bearing bushes of best special bronze.

THE QUICK CHANGE GEAR BOX is so equipped that a wide range of

metric and whitworth threads can be cut. The necessary change wheels are included in the standard equipment.

THE APRON is enclosed and comprises the gearing for longitudinal and cross feed, and for rapid traverse of the saddle by handwheel.

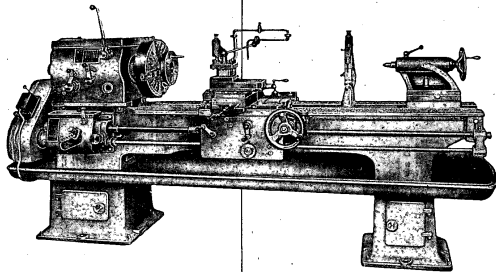
THE STOUT SADDLE can withstand the heaviest stresses and its long guides prevent any tipping up.

THE TOP REST is provided with a square tool post. The base plate rotates and is provided with graduation. The feed screws on cross and top rest are enclosed and have scale rings.

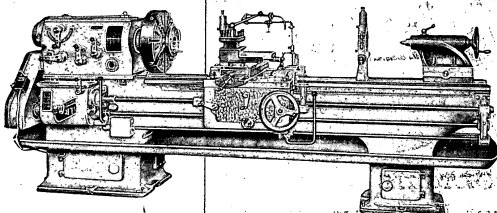
THE TAILSTOCK has long bearing on bed and can be set over for taper turning.

The lathe is provided with a reversing motor contactor for reversing spindle rotation. The contactor is provided with thermal overload relay and has under-voltage feature. It is controlled by a push button station.

6' 8"
LATHES
MODEL L



10'
LATHE
MODEL F



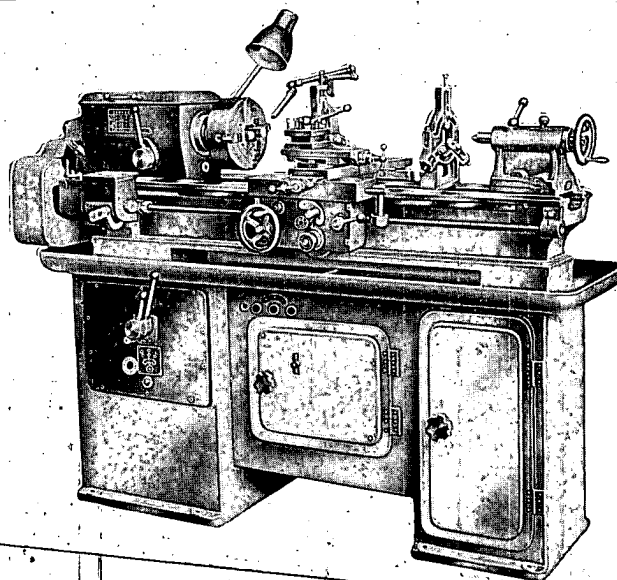
	Model L	Model F
Height of centres	8-3/4"	10 1/2"
Swing over bed	15"	19"
Swing over carriage	10"	12 1/2"
Width of gap	6"	11-13/16"
Swing over gap	24"	30"
Metric threads:		
Number of changes	29	29
Range, pitch in mm	0.25-6	0.25-6
Whitworth threads:		
Number of changes	32	32
Range, threads per inch	28-2	28-2
Number of feed changes	32	32
Number of spindle speeds	8	12
Range of spindle speeds	30-600 rpm	12.5-512 rpm
Diameter of spindle bore	1-9/16"	2-1/8"
Taper of hole in spindle	1:19.002	1:20
Taper of centres	Morse No. 3	Morse No. 4
Range of feeds:		
Longitudinal, per rev.	0.008"-0.12"	0.008"-0.12"
Cross, per rev.	0.005"-0.085"	0.005"-0.085"
Pitch of leadscrew, threads per in.	4	4
Maximum travel of carriage:		
Longitudinal	31"	60 1/2"
Cross	11"	12 1/2"
Maximum travel of top slide	6"	7 1/2"
Maximum swivel of top slide	±450	±450
Height of tool bottom to centre line	1"	13/16"
Maximum travel of tailstock spindle	6"	8"
Maximum setover of tailstock	±3/4"	±3/4"
Power of driving motor	3 HP	6 HP
Speed of driving motor	1500 rpm	1000 rpm
Distance between centres		72"
Length of bed	36"	60"
Net weight, approx.	3000 lbs.	3300 lbs.
Gross weight, approx.	3400 "	3860 "
Overall Dimensions (L x W x H)	91" x 46" x 57"	120" x 46" x 60"
Shipping Dimensions (L x W x H)	95" x 40" x 69"	120" x 40" x 69"
		150" x 45" x 63"

130X800

普通車床

ENGINE LATHE

130X800mm



中國機械進口公司

CHINA NATIONAL MACHINERY IMPORT CORPORATION

(IMPORT-EXPORT)

ER-LI-KOU, HSI-CHIAO, PEKING, CHINA

CABLE ADDRESS: "MACHIMPORT" PEKING

This is a high speed light duty lathe of the latest design which meets the most exacting demands made on single piece job production in respect of accuracy, economy and ease of production. Taper turning and thread cutting can also be performed on the machine.

Spindle runs at comparatively high speed and is driven by flat belt from speed gear box installed in base to avoid shock and permit the use of carbide tipped tools. Back gear is provided in headstock for low speed operation so that necessary torque is obtained for rough turnings.

In case of sudden overload during operation, the belt will slip; protective means like safety clutch and safety pin is, therefore, dispensed with and operation simplified.

Gear wheels for speed gear box are cut by gear shapers with high precision, minimizing noise during high speed operation. Back gears in headstock are hardened, capable of standing high torque. The spindle is mounted at its front end with adjustable bronze bearing and taper roller bearing at rear, for taking up radial and thrust loads.

Apron is provided with non-interfering lever so that it is impossible to close the split nut when power feed is engaged. By means of the tumbler gear in headstock the direction of feeds can be reversed.

This lathe is more convenient than geared head lathes.

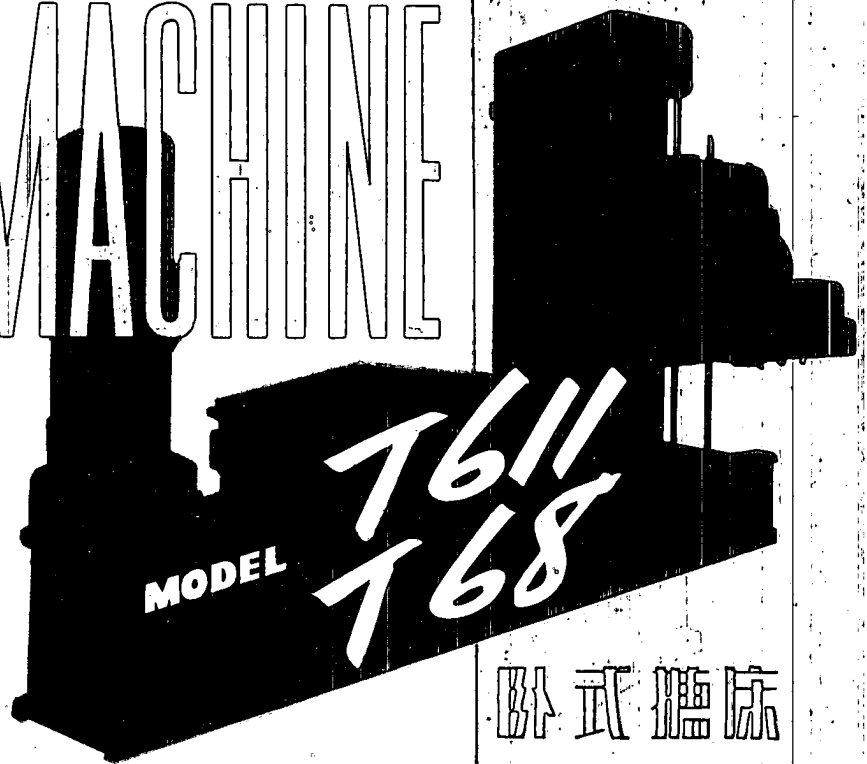
SPECIFICATION

Height of centres	135 mm
Distance between centres	810 mm
Max. turning diameter:	
Bar material	31 mm
Swing over carriage	170 mm
Swing over bed	270 mm
Max. turning length:	710 mm
Thread cutting:	
Metric:	
No.	23
Pitch	0.3, 0.35, 0.4, 0.45, 0.5, 0.55, 0.6, 0.7, 0.75, 0.8, 1, 1.25, 1.5, 1.75, 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6 mm
Whitworth:	
No.	21
Threads per inch	32, 28, 24, 20, 18, 16, 14, 13, 12, 11½, 11, 10, 9, 8, 7, 6, 5, 4½, 4, 3, 2.
Motor	1.7 KW, 1500 rpm
Machine dimension (L×W×H)	1694×600×1280 mm
Shipping measurement (L×W×H)	1860×716×1320 mm
Nett weight	745 kg
Gross weight	905 kg

Normal accessories:	Taper turning attachment	Follower rest
	4-jaw independent chuck	Set of spanners
	Steady rest	Length limit stop

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HORIZONTAL BORING, DRILLING AND MILLING MACHINE



中國機械進口公司

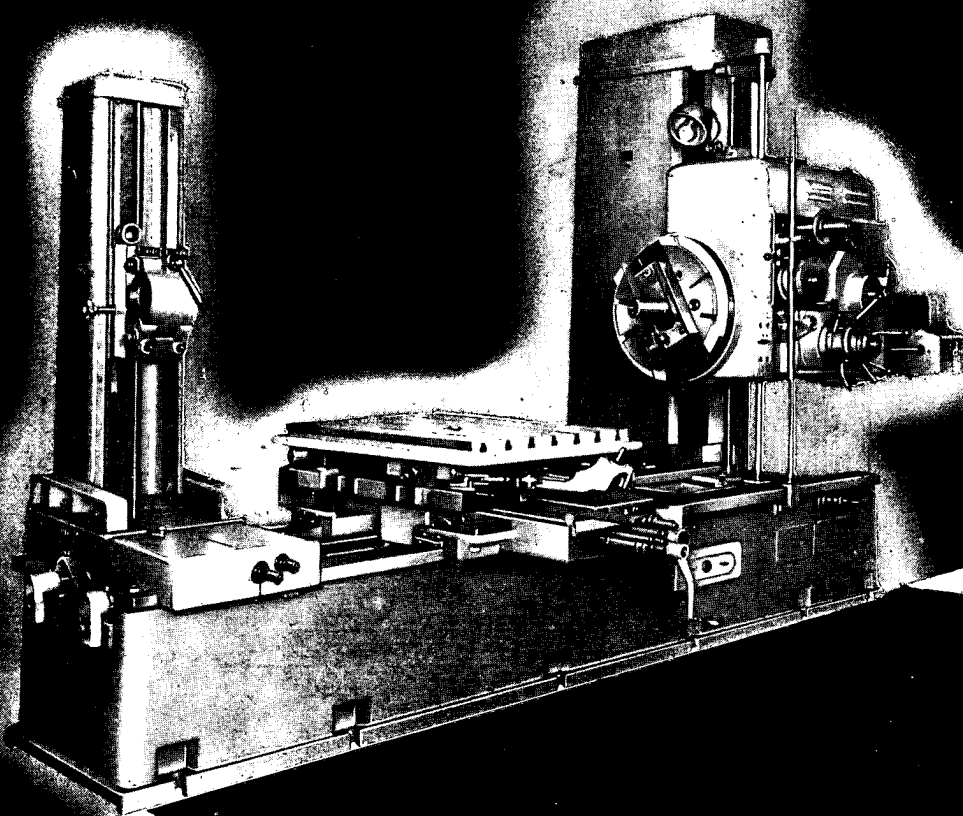
CHINA NATIONAL MACHINERY IMPORT CORP.,

Importers & Exporters

ER-LI-KOU, HSI-CHIAO PEKING, CHINA. CABLE ADDRESS: "MACHIMPORT" PEKING.

臥式鏜床

T68



HORIZONTAL BORING, DRILLING AND MILLING MACHINE

MODEL T-68

This machine can be advantageously applied for boring, drilling, counter-boring and reaming holes where close tolerance on centre distance between holes is of prime importance, as well as for tapping and facing operations. It is especially adapted in boring and end facing operations for large cumbersome castings.

Axial feeds of spindle, radial feeds of face plate slide, vertical feeds of headstock, and cross and longitudinal feeds of table are controlled through a feed box. Rapid traverse of all movable parts is accomplished by a separate motor. Cutting operations and rapid traverse motions are provided with over-load safety devices. The rotary table can be freely rotated to any angle.

MAIN SPECIFICATIONS

Diameter of spindle	85 mm.
Taper hole in spindle	Morse No. 5
Max. axial travel of spindle	600 mm.
Diameter of face plate	630 mm.
Max. radial travel of face plate slide	170 mm.
Working surface of table (L×W)	1000×800 mm.
Max. travel of table (Power or manual) :	
Longitudinal	1140 mm.
Cross	850 mm.
Distance, spindle axis to table:	
Minimum	42.5 mm.
Maximum	800 mm.
Number of spindle speeds	18

Range of spindle speed 20-1000 rpm.

Number of face plate speeds 14

Range of face plate speed 10-200 rpm.

Number of longitudinal and cross feeds of table, axial feeds of spindle, vertical feeds
of headstock and radial feeds of face plate slide 18

Range of spindle feeds per revolution of spindle 0.05-16 mm.

Range of table and headstock feeds per revolution of spindle 0.025- 8 mm.

Range of table and headstock feeds per revolution of face plate 0.05-16 mm.

Range of face plate slide feeds per revolution of face plate 0.025- 8 mm.

Speed of rapid axial movement of spindle 4.8 m/min.

Speed of rapid longitudinal and cross movements of table and vertical movement of
headstock 2.4 m/min.

Speed of rapid movement of face plate slide 1.2 m/min.

Two-speed electric motor for main drive:

Power 6.5 KW.

Speed 1500/3000 rpm.

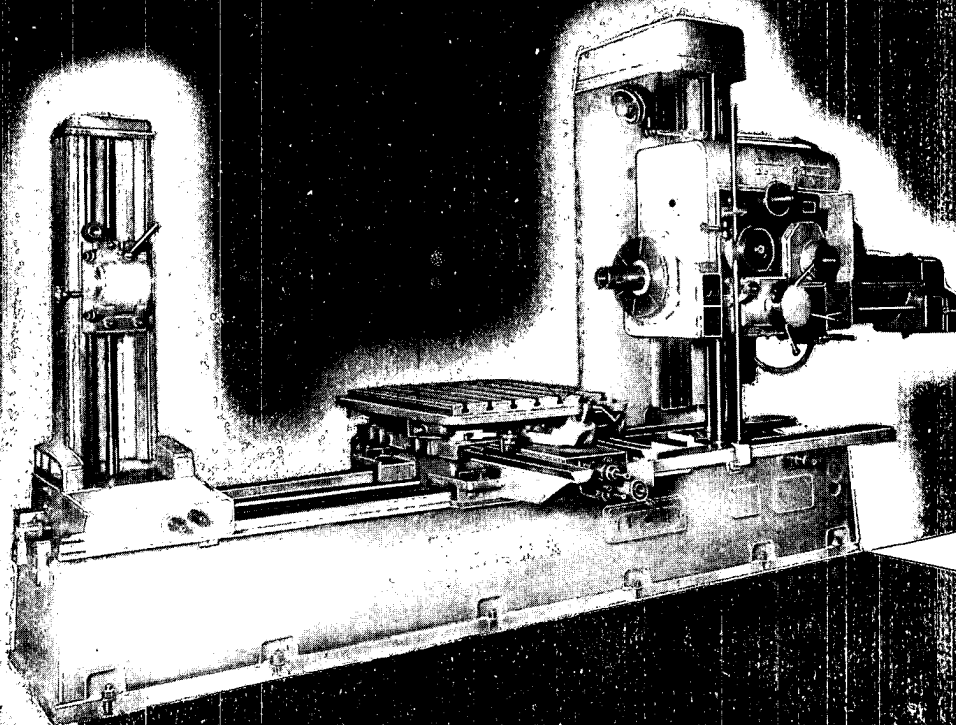
Electric motor for rapid traverse:

Power 2.8 KW.

Speed 1500 rpm.

Overall dimensions (L×W×H) 5070×2250×2755 mm.

Net weight 12000 kgs. approx.



T6W

HORIZONTAL BORING, DRILLING AND MILLING MACHINE

MODEL T611

This machine is equipped with an extra-rigid main spindle principally suitable for processing jobs on work-pieces of ferrous metal, especially for cast iron parts where radial feeds are not required. This machine is suitable for boring, drilling, counterboring and reaming hole with close tolerance on center distance between holes as well as for tapping, and milling by using milling cutters with shank or end milling cutters.

Spindle drive is effected by two-speed electric motor through a speed gear box.

Axial feed of spindle and feeds of table are effected through a feed box. The rapid traverse of all movable parts is accomplished by a separate motor. Cutting and rapid traverse motions are linked to each other and may stop automatically when overloaded.

Changes of cutting speeds and feed are regulated by a manual operated mechanism. The working table is mounted on balls and can be freely rotated to any angle by hand and fixed by a stop when the table revolves to 90°. This machine is equipped with graduation scale and safety stop, and the co-ordinate position of headstock and working table can be accurately set by use of micrometer and gauge block.

MAIN SPECIFICATIONS

Diameter of spindle 110 mm.
Taper in spindle Morse No. 6
Max. axial travel of spindle 600 mm.
Working surface of table (L x W) 1000x800 mm.
Max. travel of table (power or manual):
 Longitudinal 1225 mm.
 Cross 850 mm.
Distance, spindle center line to table 45-800 mm.
Number of spindle speeds 18
Range of spindle speeds 20-1000 rpm.
Number of longitudinal and cross feeds of table, axial feeds of spindle, vertical feeds
 of headstock, each 18
Range of spindle feed per revolution of spindle 0.05-16 mm.
Range of working table and headstock feeds per revolution of spindle 0.025- 8 mm.
Speed of rapid axial movement of spindle 4.8m/min.
Speed of rapid longitudinal and cross movement of table and vertical movement of
 headstock 2.4m/min.
3-phase, A.C. motor:
 Main drive (two-speed):
 Power 6.5 KW.
 Speed 1500-3000 rpm.
 Electric motor for rapid traverse:
 Power 2.8 KW.
 Speed 1500 rpm.
Overall dimensions (L x W x H) 5070x2250x2755 mm.
Net weight of the machine (approx.) 11600 kgs.

BRANCHES:

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25X1

GEAR HOBBING MACHINE

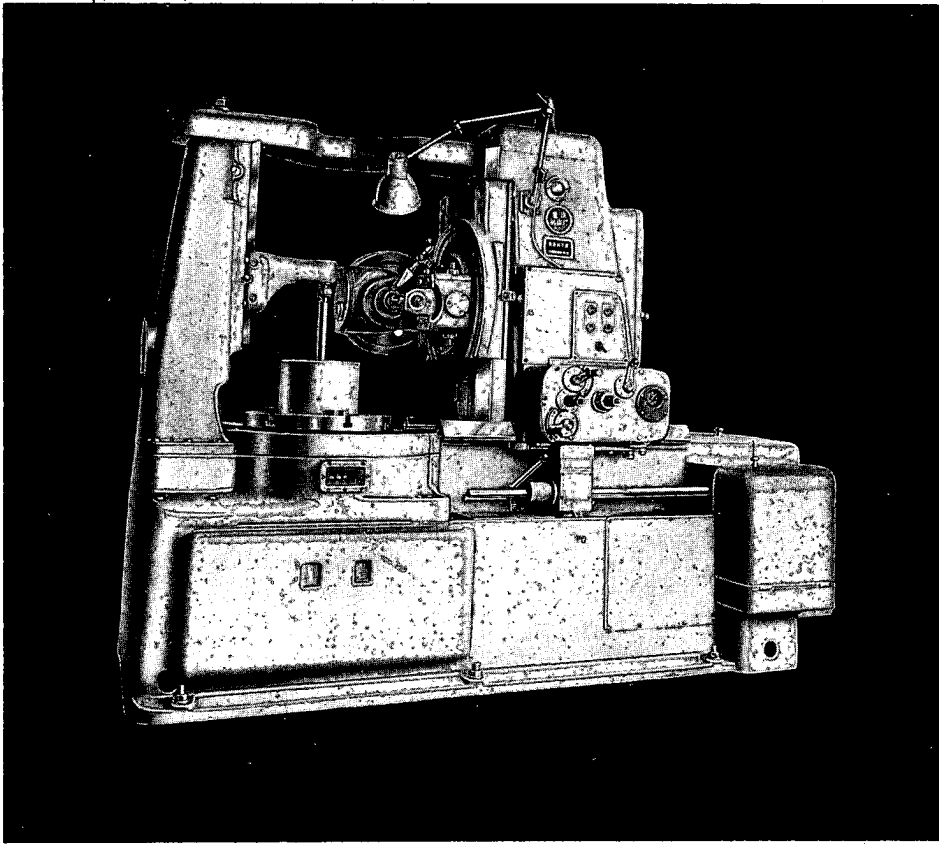
滾齒機

中國機械進口公司

CHINA NATIONAL MACHINERY IMPORT CORPORATION

(IMPORT - EXPORT)

ER-LI-KOU, HSI-CHIAO PEKING, CHINA CABLE ADDRESS: MACHIMPORT PEKING



The illustrated GEAR HOBBIING MACHINE MODEL J38 is designed for hobbing spur, helical and worm gears with high speed steel hobs in lot or mass production. This machine is rigidly constructed with precision workmanship, thus ensures high output and high grade products.

The machine is provided with hydraulic device for balancing the weight of tool slide and shock of cutting resistance. This eliminates the backlash between elevating feed screw and nut, rendering conventional or climb hobbing possible.

Radial or tangential feed can be used for cutting worm wheels, while the latter can be accomplished by a special tangential hob slide which can be supplied on special order.

The machine is provided with 3 independent motors for driving hob spindle, rapid traverse and coolant pump.

SPECIFICATION

Max. module to be cut:		
At normal speed	6	
At slow speed	8	
Max. outside diameter of spur gear to be cut (without workstay)	800 mm	
Max. outside diameter of helical gear to be cut:		
For helix angle 30°	500 mm	
For helix angle 60°	190 mm	
Max. height to be cut (spur gear)	275 mm	
Distance between cutter spindle and gear blank centre line:		
Minimum	30 mm	
Maximum	500 mm	
Vertical traverse of cutter	310 mm	
Minimum distance between surface of work table to cutter spindle centre line	200 mm	
Max. diameter of hob	120 mm	
Diameter of hob spindle (changeable)	22, 27, 32 mm	
Diameter of table bore	80 mm	
Diameter of indexing worm wheel	624 mm	
Diameter of spindle of gear blank	35 mm	
Number of cutter spindle speeds	7	
Range of cutter speed	475-192 rpm	
Feed per revolution of gear blank:		
Vertical	0.025-3 mm	
Radial	0.06 -0.72 mm	
Tangential	0.25 -1 mm	
Main drive motor:		
Power	2.8 KW	
Speed	1420 rpm	
Rapid traverse motor:		
Power	1 KW	
Speed	1410 rpm	
Weight (with accessories) approx.	3800 kg	
Overall dimension (L×W×H)	2406×1210×2030 mm	

STANDARD ACCESSORIES (furnished with the machine):

1. 8 speed change gears.
2. 43 change gears for indexing feed and differential drives.
3. 3 hob arbors of diameters 22, 27 and 32 mm with spacing rings.
4. 1 work arbor, diameter 35 mm with washers.
5. 1 work rest.
6. 2 couplings for differential connection.
7. Set of wrenches and crank.

Every care has been taken in compiling this publication, but the specifications and details may be altered from time to time as deemed necessary and must not, therefore, be taken as binding.

CHINA NATIONAL MACHINERY IMPORT CORP.

(IMPORT — EXPORT)

Er-li-Kou, Hsi-Chiao, Peking, China
Cable Address: "MACHIMPORT" Peking

B R A N C H E S

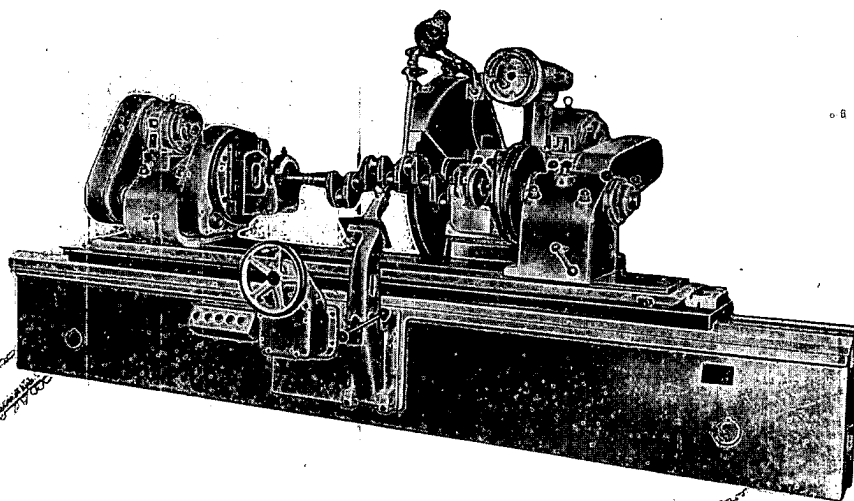
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25X1

曲軸磨床

CRANKSHAFT GRINDING MACHINE

Model M8230



中國機械進口公司

CHINA NATIONAL MACHINERY IMPORT CORPORATION
(IMPORT-EXPORT)
ER-LI-KOU, HSI-CHIAO PEKING CHINA • CABLE ADDRESS: MACHIMPORT PEKING

曲 軸 磨 床

CRANKSHAFT GRINDING MACHINE MODEL M8230

This machine is valuable for repairing crank pins in the automobile and tractor repair shops. General cylindrical grinding can also be performed on this machine.

Workpiece is held in two chucks, one at headstock and the other at tailstock. The chucks and the balancing weight may be adjusted according to the crank radius.

Change of work speed is effected through the cone pulley.

The longitudinal traverse of the table and the cross feed of the wheel head are actuated by hand.

The machine is equipped with three motors.

Grinding wheel truing device, V gauges for rapid setting up of work, and driving plate for the workpiece to be ground between centres are also included.

SPECIFICATION

Centre height over bed	300 mm (11 $\frac{3}{8}$ ")
Distance between centres	1600 mm (63")
Distance from wheel axis to centre-line of centres:	
Minimum	275 mm (10 $\frac{5}{8}$ ")
Maximum	595 mm (23 $\frac{3}{4}$ ")
Diameter of crank pin to be ground (with steady rest):	
Minimum	30 mm (1 $\frac{1}{8}$ ")
Maximum	100 mm (3 $\frac{5}{8}$ ")
Maximum radius throw	110 mm (4 $\frac{3}{4}$ ")
Maximum length of crankshaft to be ground ...	1600 mm (63")
Maximum weight of workpiece	100 kg (220 lbs.)
Maximum longitudinal travel of table (by hand) ...	1600 mm (63")
Maximum swivel of table	5°
Maximum cross travel of wheelhead (by hand)... ..	320 mm (12 $\frac{3}{8}$ ")
Dimension of grinding wheel ϕ :-	
Minimum ϕ	550 mm (21 $\frac{3}{8}$ ")
Maximum ϕ	900 mm (35 $\frac{3}{8}$ ")
Width	33-40 mm (1 $\frac{3}{8}$ " -1 $\frac{3}{4}$ ")
Bore	305 mm (12")
Work speeds	33; 64; 115 rpm

Motors:- 3-phase, A.C.

for Wheelhead:

Power 7 KW
Speed 960 rpm

for Headstock:

Power 1 KW
Speed 960 rpm

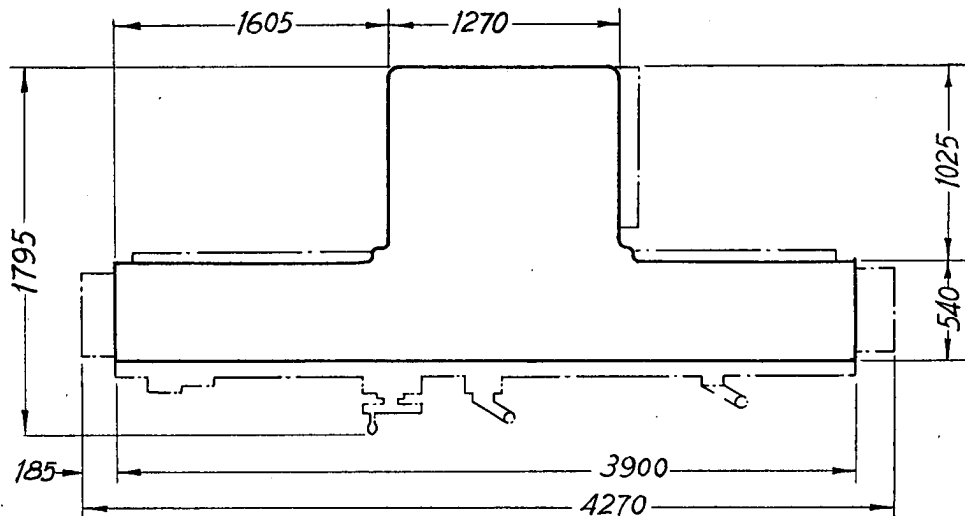
for Coolant Pump:

Power 0.125 KW
Speed 2800 rpm

Overall dimension (L × W × H) 3930 × 1795 × 1620 mm

(154³³/₃₂" × 70³³/₃₂" × 63³³/₃₂")

Net weight... .. 6000 kg approx. (13,228 lbs.)



Note: The weights, dimensions, capacities, and performance ratings in brackets are approximate equivalents in the English system for indicative purpose only.

For improvement of the machine, we reserve the right to alter either the design or the specification.

B R A N C H E S

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